

## ABSTRACT OF THE DISCLOSURE

In the invention, it is possible to hear a voice and music of a portable audio device such as a portable telephone, an MD player, etc. in a hand free state without mounting an additional amplifier kind. Therefore, a plug transmitter is plugged into a cigar lighter socket arranged in a console portion or an arm of a side door. An external output terminal of a portable audio device such as an MD player is connected to the plug transmitter by an audio cable. A transmitting circuit is built in the plug transmitter, and receives electric power from the cigar lighter socket, and transmits an audio output from the portable audio device as a radio wave in a receiving frequency band of an AM radio mounted to an automobile. Thus, it is possible to enjoy music from a speaker within the automobile. If a portable telephone is connected to the plug transmitter, a talk can be carried out in a hand free state.